

Abstract of disclosure

The method relates to the production of a coated structure (1) which is suitable for carrying out heterogeneous catalyses. This structure is a catalyst body comprising layers (2, 3) of film-like sheet metal lamina (10) which are arranged one above the other as well as flow channels which are integrated in or between the layers. Some or all of the sheet metal lamina can be reshaped so that the flow channels are formed as a result of a shaping of the sheet metal lamina. Coatings (11) are applied in a container (101) to the individual sheet metal lamina (10) — preferably prior to a reshaping — with a plasma spray method, namely an LPPS method, using a plasma flame (212) which acts defocusingly on an injected powder jet. These coatings contain catalytically active substances; they are porous or have a high roughness. A value between about 15 and 1500 Pa, preferably between 100 and 500 Pa is set for the pressure in the container. After the coating and where appropriate a reshaping the sheet metal lamina are fitted together into a stack or a winding body. Instead of sheet metal lamina other surface-like structures can also be used.

(Figs. 1 and 4)